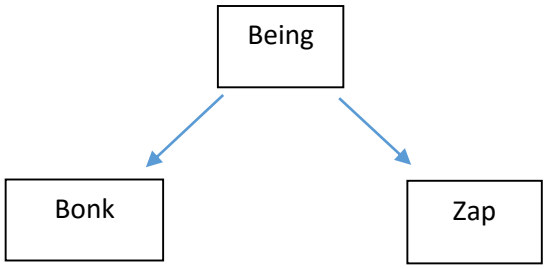
Casting for dummies

In the 123 main assignment we deal with interfaces, this mean we end up with something like this in terms of object relation.



Where bonks and zaps implement the methods in being. Both have to do each thing however the code to do it can be different. In terms of this assignment most things should be the same, ie both need to move and can probably share that code, both will return positions in the same way ect. In fact the only things that will really be different is breeding and killing. However how will you call Being.breed(); as that is not a method in Being (remember you cannot change the interface) this means we have to use casting and instanceof.

Instance of is an operator that will return true or false, it is used like this:

```
Being temp = new Bonk();

If(temp instanceof Bonk){

        Temp.breed();

}

Else{

        Temp.kill();

}
```

This piece of code will call the breed function on temp if temp is a bonk, if temp is not a bonk then it must be a zap so it will call kill.

Actually it wont, because this is where casting comes into it. Casting is treating object A as B, or in terms of the assignment Being temp as Bonk temp. Casting is done like this:

```
Being temp = new Bonk();

If(temp instanceof Bonk){

        ((Bonk) temp).breed();
}

Else{

        ((Zap) temp).kill();

}
```

You should always double check that the being is an instanceof before casting it as if you cat a zap to a bonk that’s gonna crash your code. That bad guys.